T00280 T222660

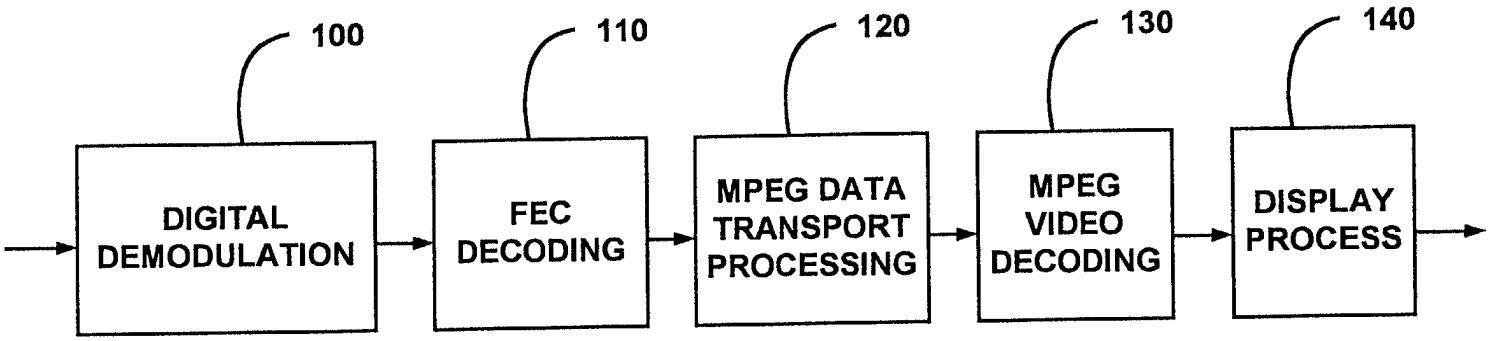

FIGURE 1
(PRIOR ART)

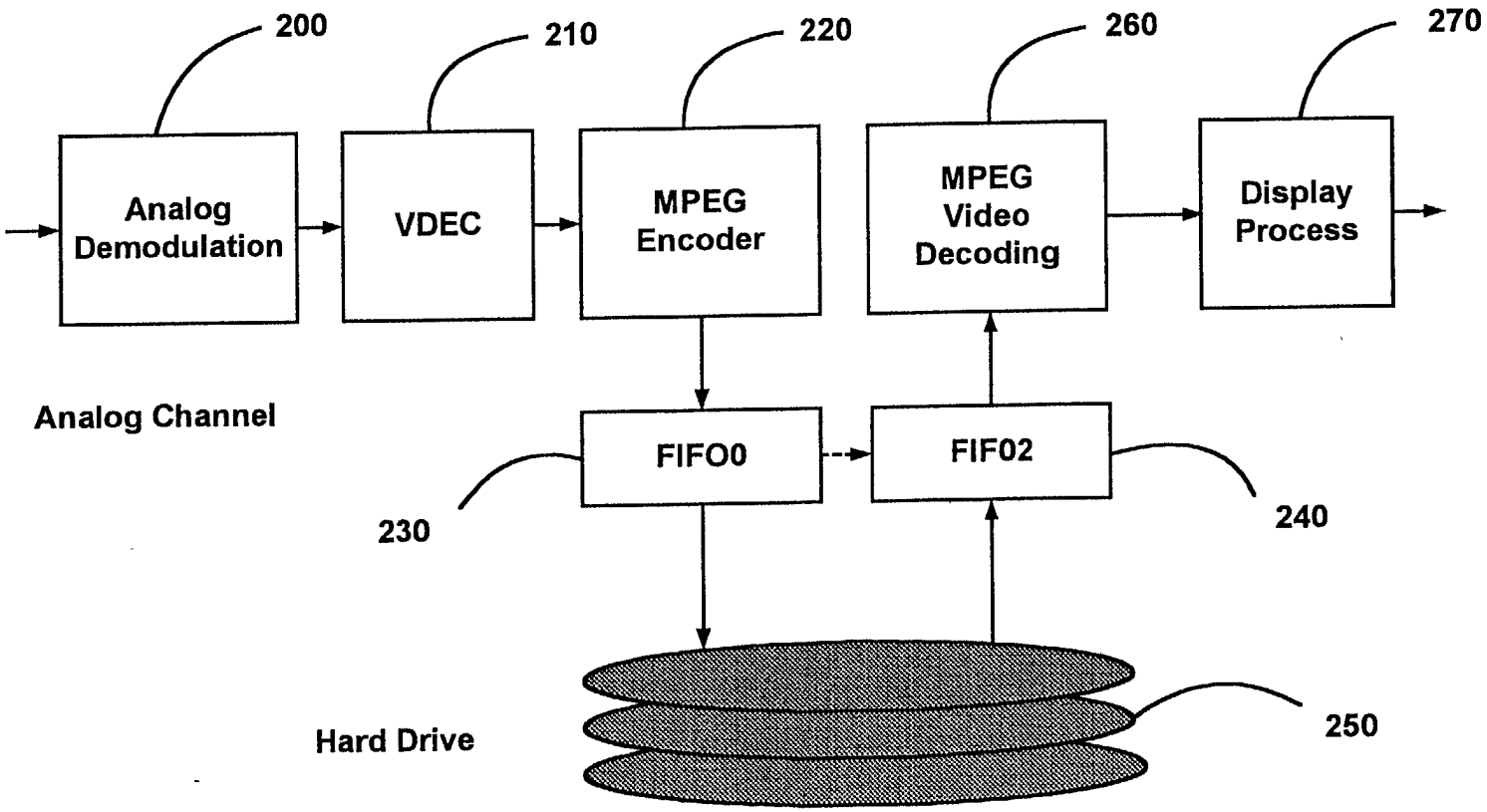

FIGURE 2
(PRIOR ART)

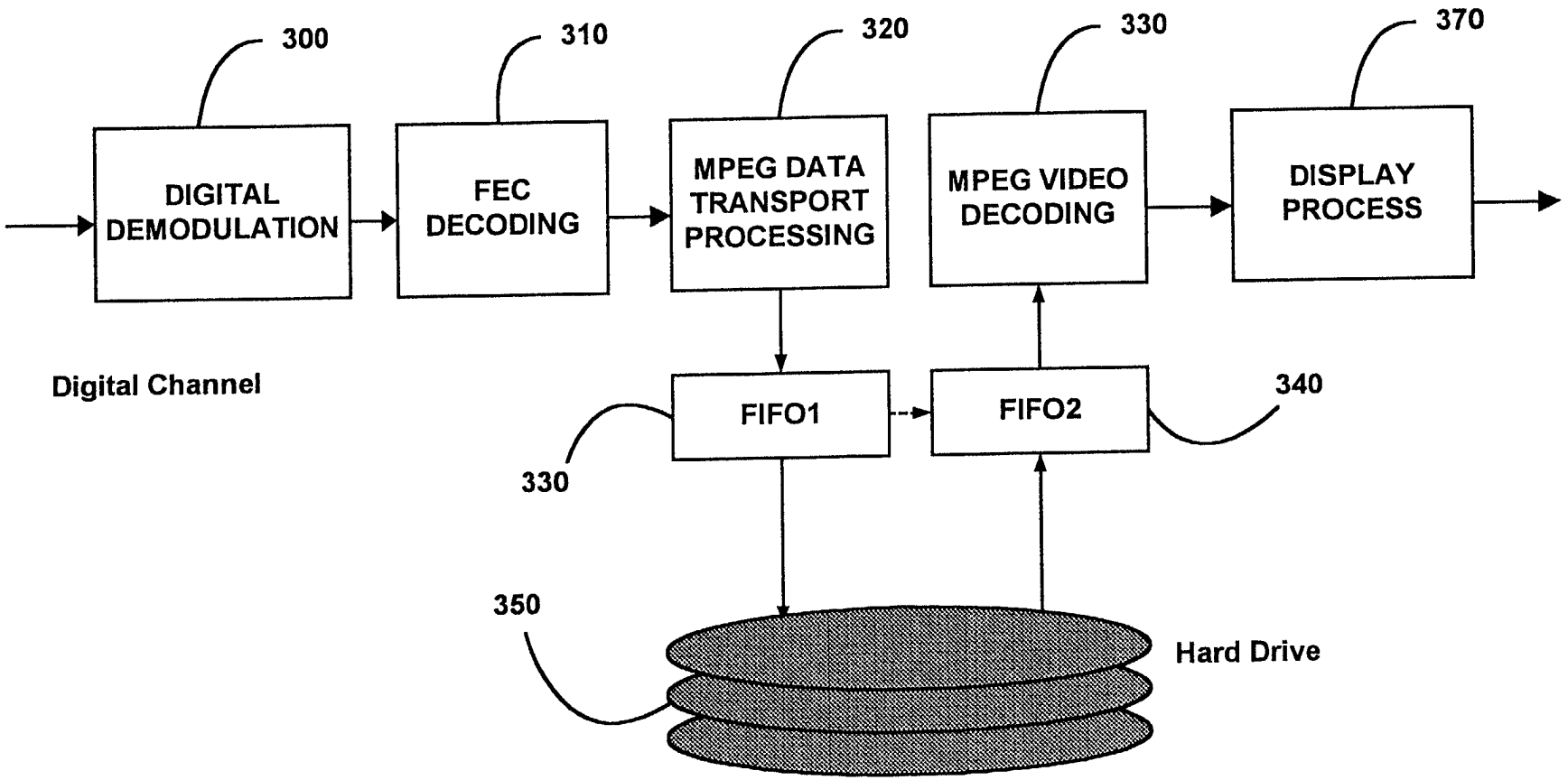

FIGURE 3
(PRIOR ART)

T0820 T22660

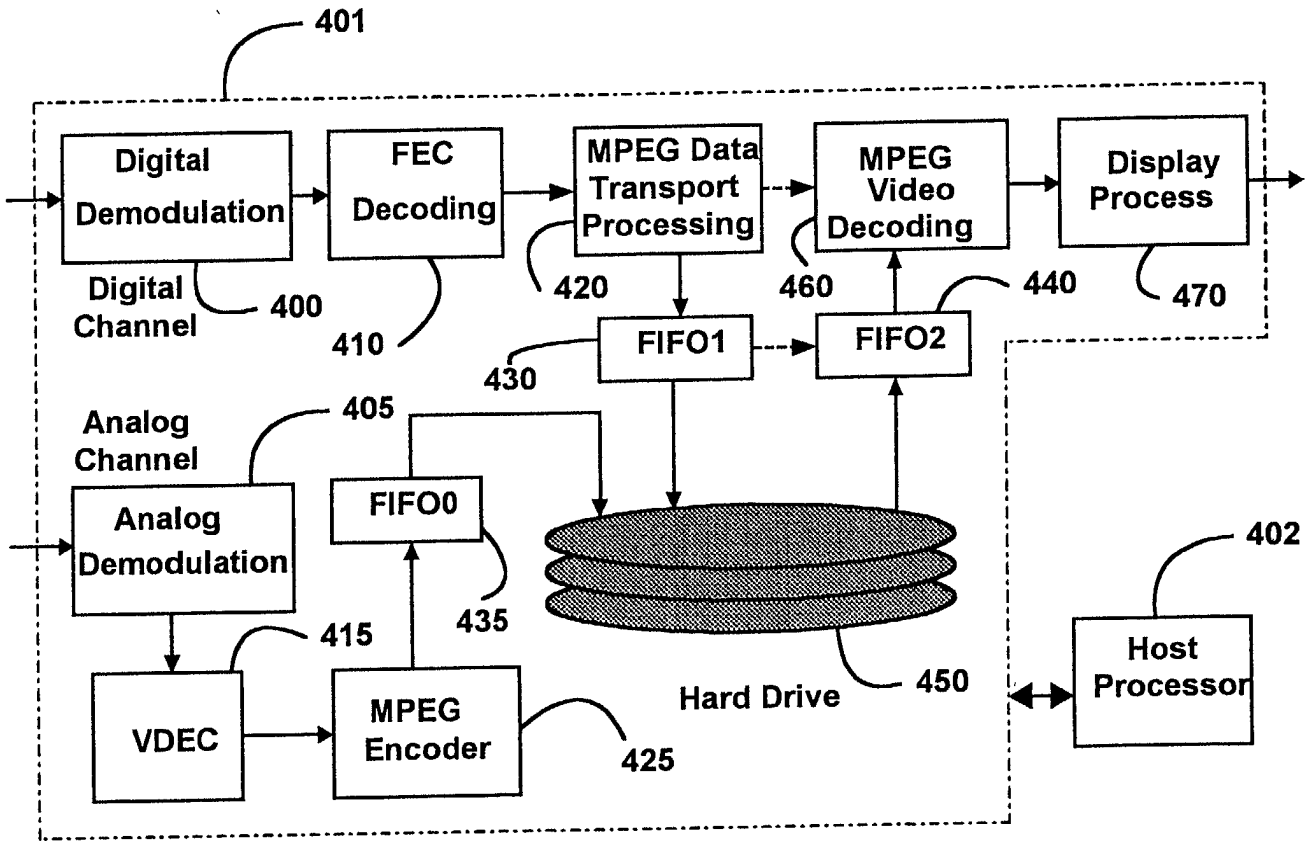

FIGURE 4
(PRIOR ART)

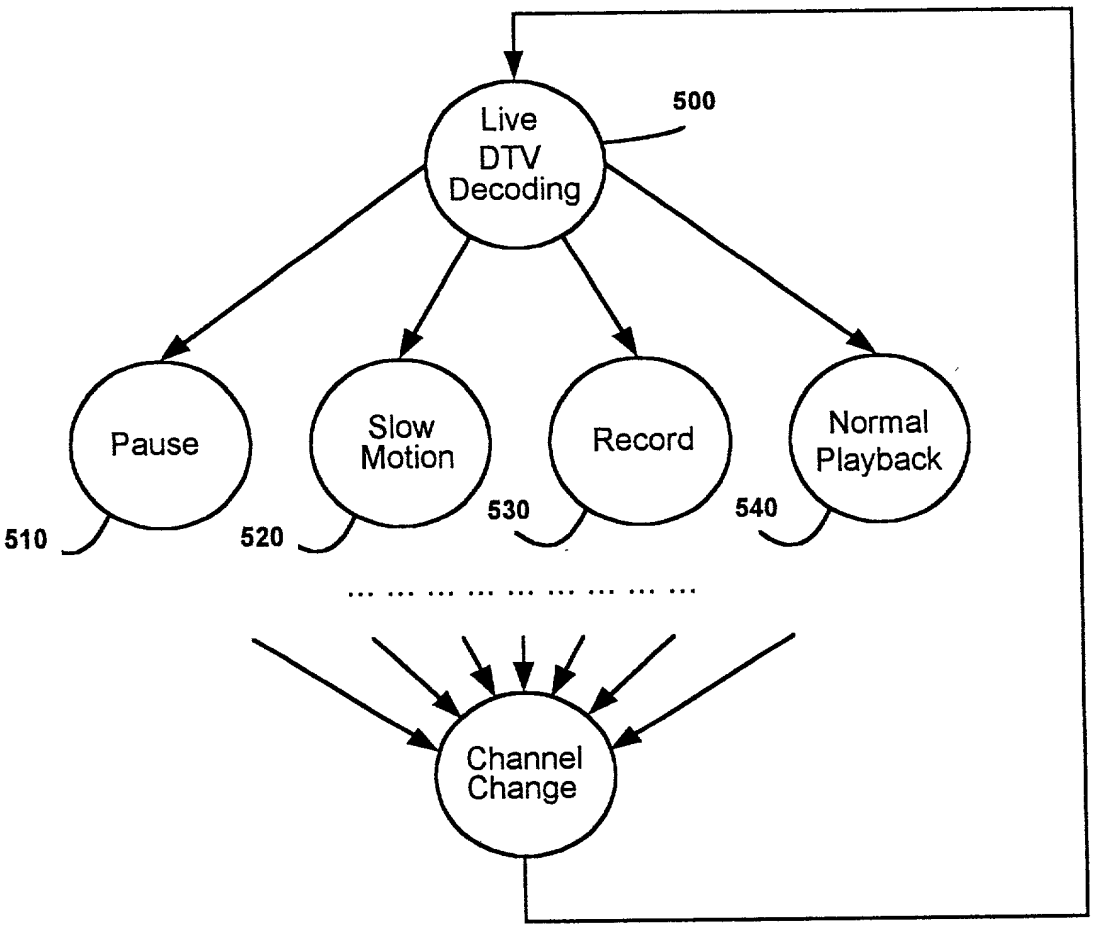
Live
DTV
Decoding
500
Pause
510
Slow
Motion
520
Record
530
Normal
Playback
540
Channel
Change

FIGURE 5

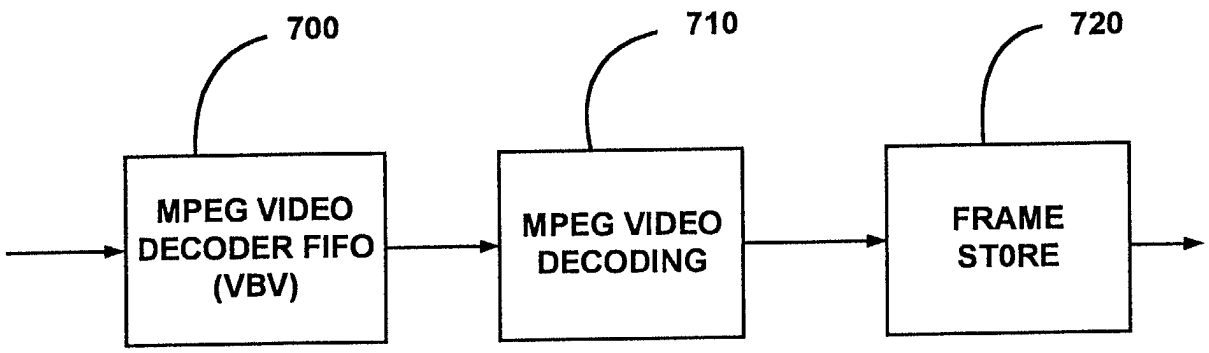
700
710
720
MPEG VIDEO DECODER FIFO (VBV)
MPEG VIDEO DECODING
FRAME STORE

FIGURE 6

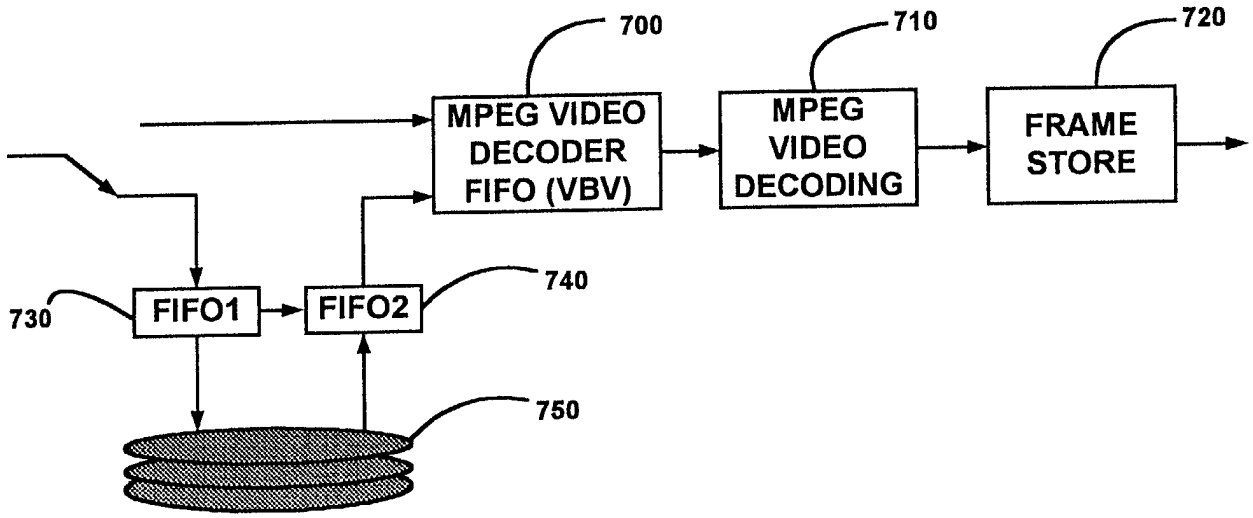
700
710
720
MPEG VIDEO DECODER FIFO (VBV)
MPEG VIDEO DECODING
FRAME STORE
730
FIFO1
FIFO2
740
750

FIGURE 7

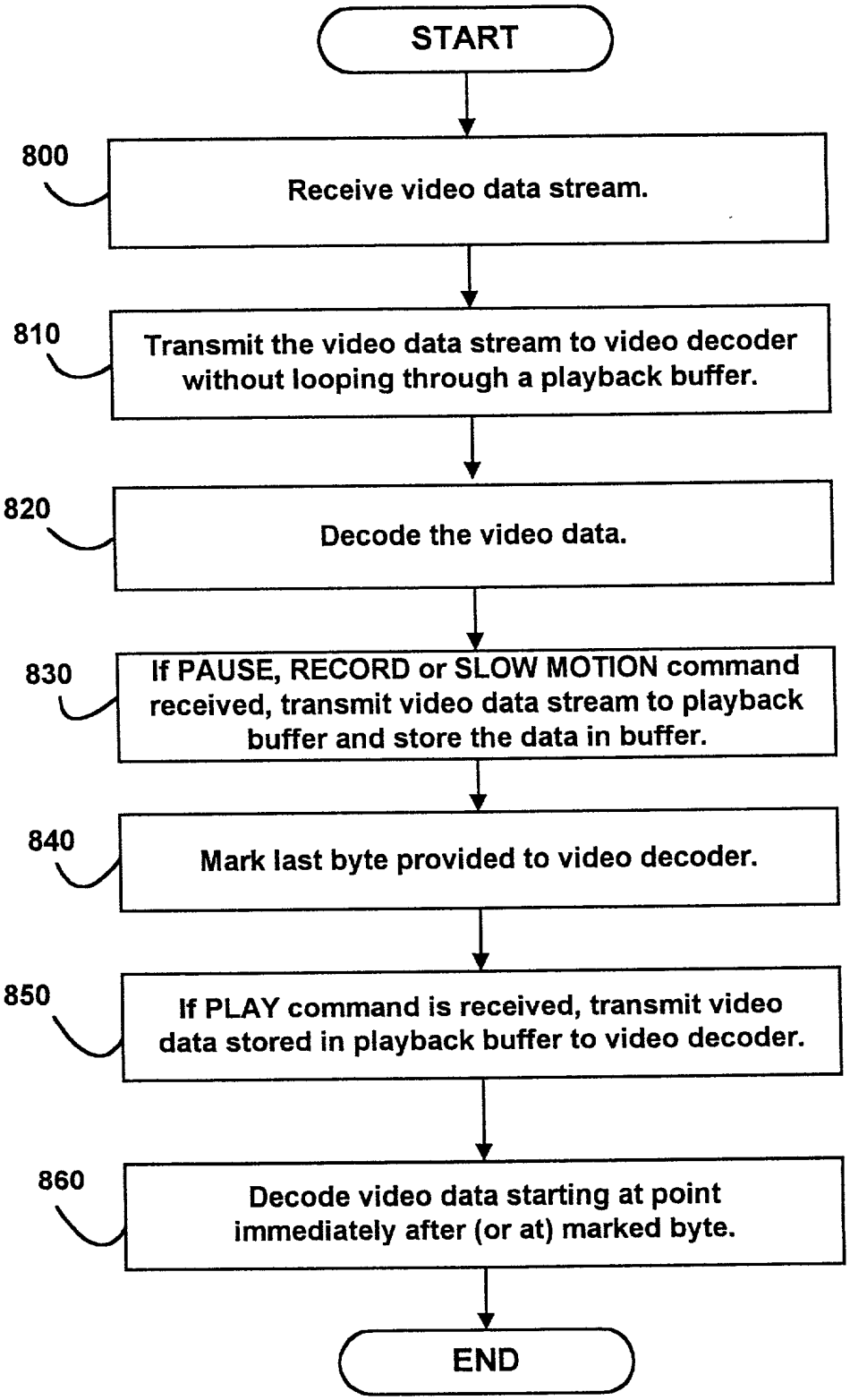
START
800
Receive video data stream.
810
Transmit the video data stream to video decoder without looping through a playback buffer.
820
Decode the video data.
830
If PAUSE, RECORD or SLOW MOTION command received, transmit video data stream to playback buffer and store the data in buffer.
840
Mark last byte provided to video decoder.
850
If PLAY command is received, transmit video data stored in playback buffer to video decoder.
860
Decode video data starting at point immediately after (or at) marked byte.
END

Figure 8

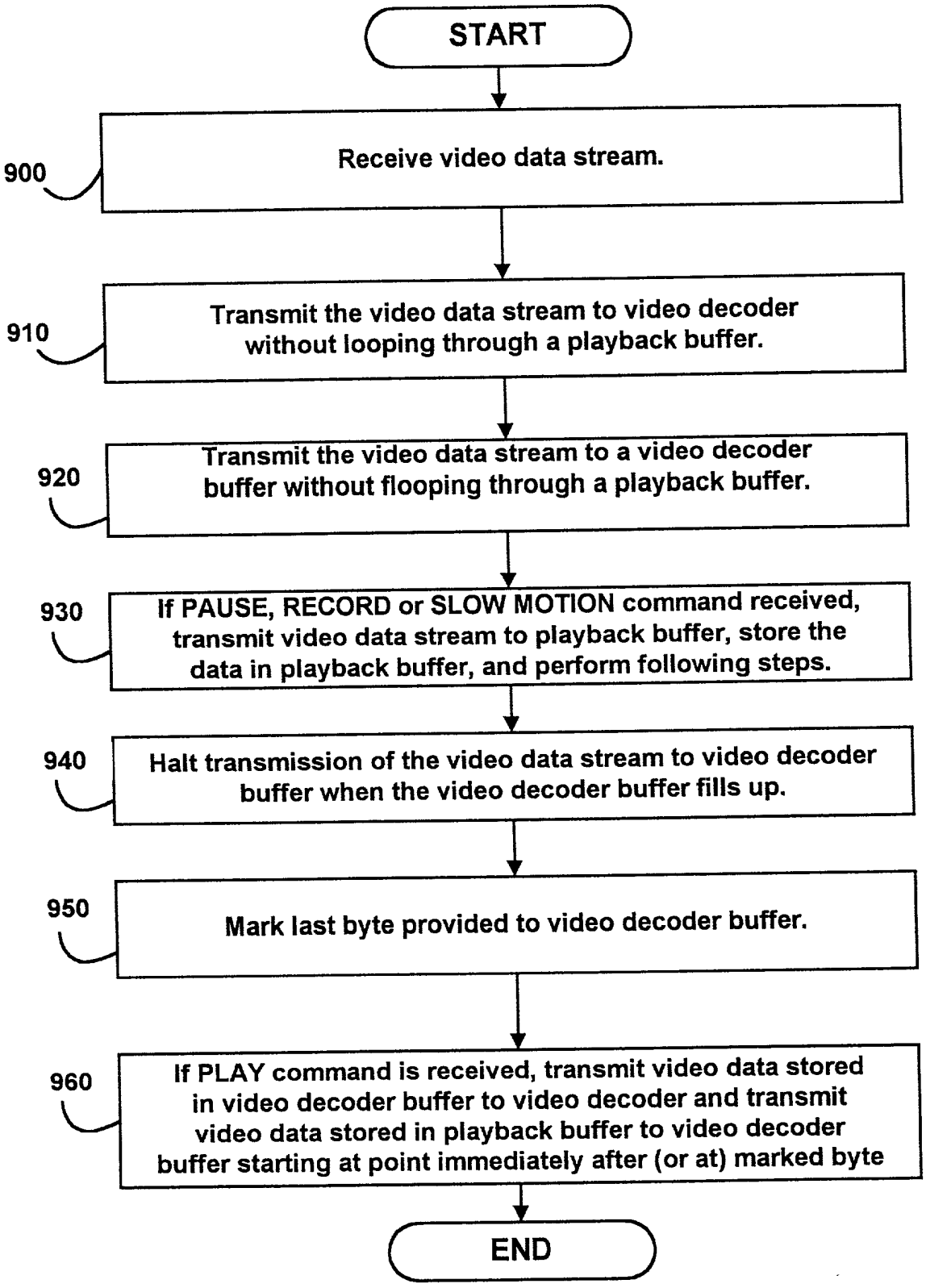
START
900
Receive video data stream.
910
Transmit the video data stream to video decoder without looping through a playback buffer.
920
Transmit the video data stream to a video decoder buffer without flooping through a playback buffer.
930
If PAUSE, RECORD or SLOW MOTION command received, transmit video data stream to playback buffer, store the data in playback buffer, and perform following steps.
940
Halt transmission of the video data stream to video decoder buffer when the video decoder buffer fills up.
950
Mark last byte provided to video decoder buffer.
960
If PLAY command is received, transmit video data stored in video decoder buffer to video decoder and transmit video data stored in playback buffer to video decoder buffer starting at point immediately after (or at) marked byte
END

Figure 9

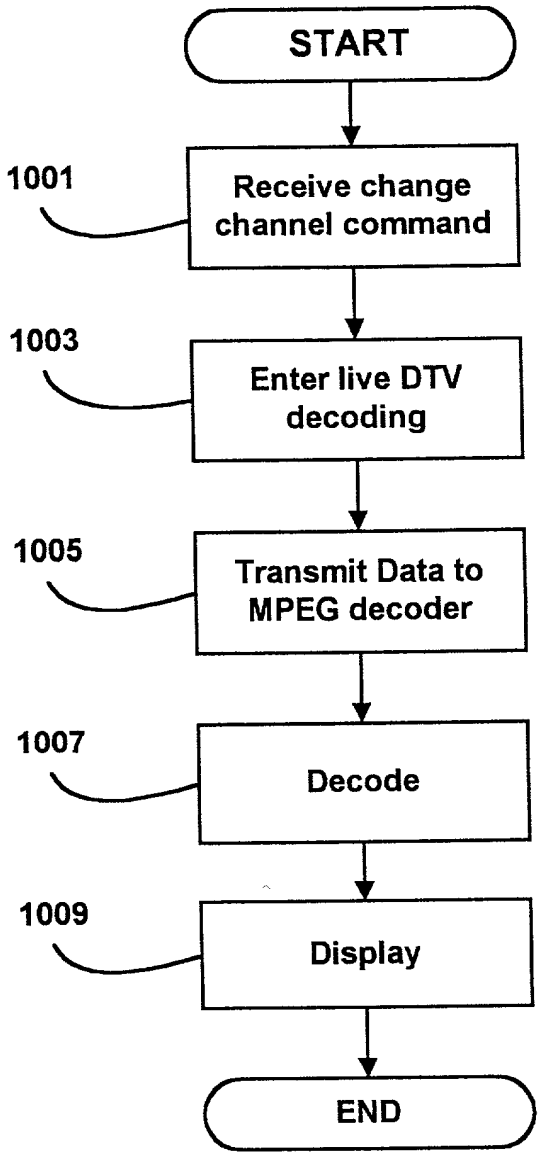
START
1001
Receive change channel command
1003
Enter live DTV decoding
1005
Transmit Data to MPEG decoder
1007
Decode
1009
Display
END

FIGURE 10

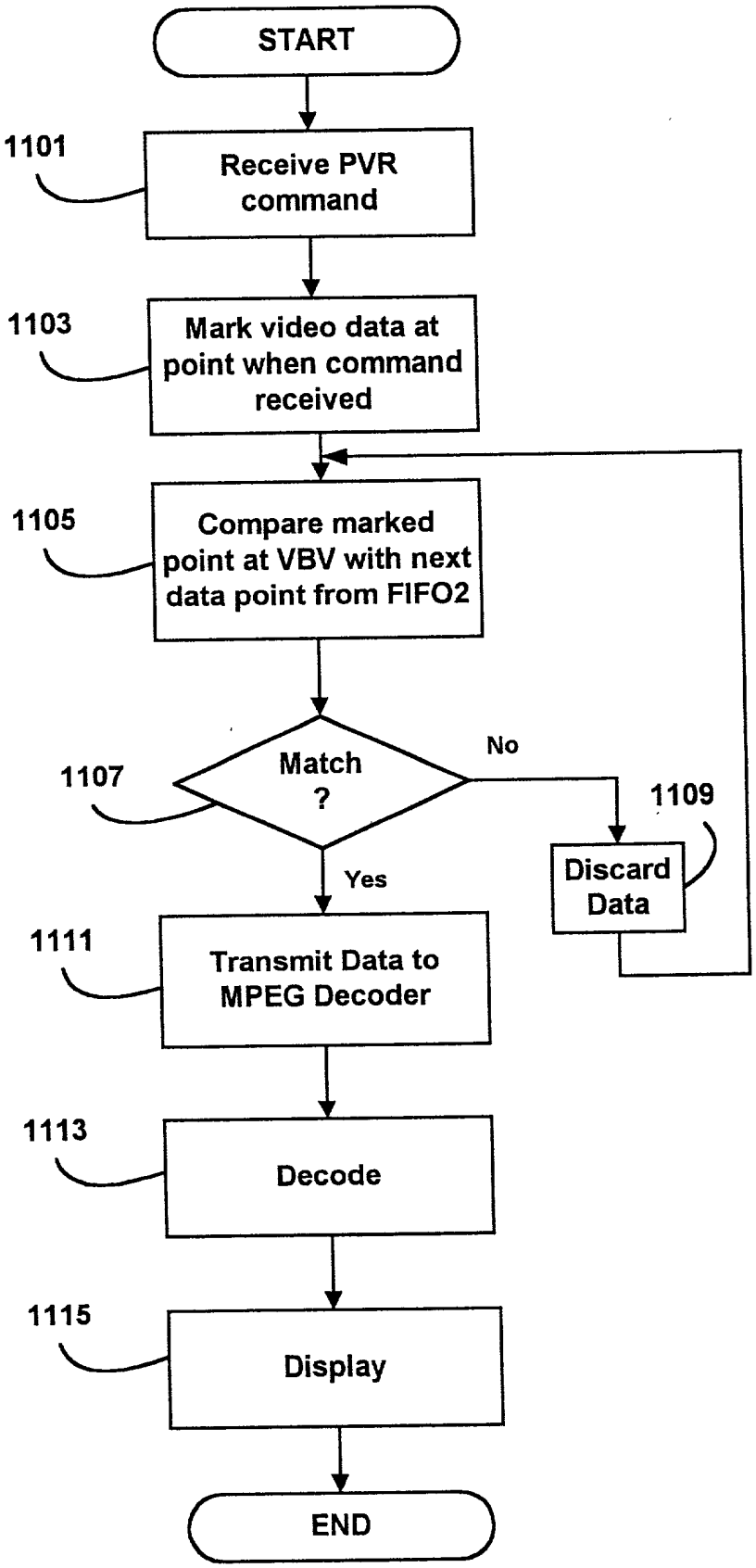
START
1101
Receive PVR command
1103
Mark video data at point when command received
1105
Compare marked point at VBV with next data point from FIFO2
1107
Match ?
No
1109
Discard Data
Yes
1111
Transmit Data to MPEG Decoder
1113
Decode
1115
Display
END

FIGURE 11